

## RAW SEQUENCE LISTING

*Merri*

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number:

10/560,652

Source:

IFWP

Date Processed by STIC:

12/28/2005

# **ENTERED**



IFWP

RAW SEQUENCE LISTING DATE: 12/28/2005  
PATENT APPLICATION: US/10/560,652 TIME: 12:58:44

Input Set : A:\SEQLIST532792000800.txt  
Output Set: N:\CRF4\12282005\J560652.raw

RAW SEQUENCE LISTING DATE: 12/28/2005  
 PATENT APPLICATION: US/10/560,652 TIME: 12:58:44

Input Set : A:\SEQLIST532792000800.txt  
 Output Set: N:\CRF4\12282005\J560652.raw

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 54 aaacacacac tataaaacgg aattaagtgt ctaatttga gtatgtattc ttgagaaaat 1620  
 55 ttctctaaat agtttggaga ttgaggttt tgcactgtc gctacggta ccaaactgt 1680  
 56 gaaactattg tgcataata attaatttg gatTTTAAG gacaattgt 1740  
 57 actagggtat ggattggatt gtggtaaagt caaattgtc gagaggtcg aacagttag 1800  
 58 aagcaattt aagaaagatga taatttattca tttgtatgg tttcttgag ttatgtctt 1860  
 59 atggataatg tccatggatg tgaagaccac caacattgt 1920  
 60 acgtgaaaag tagttgatt tgggtctca tgacttctca caaactcagc ttccatagc 1980  
 61 attgcattgc aatttacaat gtgttgc ccccttagta ctaccaatac taccatatga 2040  
 62 acaacgatcg ggatcagcaa aatctatagc tttgtagccg tcttctatga ctcatcttt 2100  
 63 ccacaaaaag tcattgacat caactgtc aagatgactg acatacgaa ttggatccta 2160  
 64 ttttccacta ggccactctg aaaagaaaaa aacacagata aaaaggccat gggccatg 2220  
 65 tccaactttt ggaccaatct taaatggct tcacaatgg tatcatggc ttattttgat 2280  
 66 tcaagtctgg actaactaca actatgtata caaaatgtt atccacatag cccaaaataa 2340  
 67 gatataat tggttacttt catttttt tacgtatcg accttaagct tggtttagt 2400  
 68 tttggcggtc gatgaaccac ctccaaacca attatattct tcacaagatt ctctgcattt 2460  
 69 atccacacaga tggtaaacaa tctaataaaa tttaattcac ttcttccacca aaaaaaataa 2520  
 70 aattaaattt attgcccata ttacacaaat aaaaagataa taacgacca gtcctttgt 2580  
 71 tatcccatat tctatcgaa gcatccaaac caaattttgt caatctaatt tatcttctcc 2640  
 72 tctcccgag aagaaggaaa cttacaattt acaaagaacg agcttcaata aaaaatttcca 2700  
 73 aagaaattac cgtcgccgaa tgcgttaggct cgagaagaat caccaattc caaggggaga 2760  
 74 gagactgaat ttcttttga ttcacgtaac aacaacgctc agagactatg tcgtcggagg 2820  
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 82 tattaaatatg tgattacaga gaatttagta tataattgccc tgcataatgtt gtaactaato 3300  
 83 acattgtgg ctatttctaa tatccactca acatagtatt gtatttcaaa gtacgtttt 3360  
 84 tgcgtttaa aatttcaattt acataatctg tctatgtcatt ctttgcattt gtcaggct 3420  
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 89 gagctatcac tggtgatctt caatttctcat gtttcatattt gttgtacgtg ttgtgttca 3720  
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 99 atatcgatca cgattgcaaa atgtgaacg gaatgagaat ggtgatgcgc aagctgagag 4320  
 100 tcgattatca gatgctgaga cagtggttc atattttgtt aaggtactttt ttttaactga 4380  
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Input Set : A:\SEQLIST532792000800.txt  
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102 catattggtg tgcagtgttc tggttctttg tctgttgat gtccaaagca gttccaaca 4500  
 103 attagagcac tatacaatgc ggtgagactg cgtgtctatt tgctattcac tagatgtaca 4560  
 104 tctatcaaaa gtcttcttt tgtcagacag ctcttcaaa ggctgtctt attctcaatg 4620  
 105 ctataaactg gtgtaatctt tggttatac tggtttaat gcaggaaag ccaatcaac 4680  
 106 aaagtggca cttgtcaatt gacacggcta agaacacatt ctatctgtc ctgatctcg 4740  
 107 agaattttgt ggaggcatgt gctgccttaa gtcattctgc tacaatttg ccacagactc 4800  
 108 agagccctgt gaaagtggac agggccactg ttgctccatc tattccagtc actggcaac 4860  
 109 ctccagctcc tgtgtcatca gggttctta ctgacaacat ccattttct tagtccaact 4920  
 110 atcttgcatt ttcttggc ttcttggat tctatctgc ttctctatg gaagatctc 4980  
 111 ttttgcattga ttttcagcca atggacctat tcagaatcg caaccagggtt ctgttggacc 5040  
 112 agttccaaact gctactgtga aagttgtaaat tctatttgat cttttttagtc agttggagga 5100  
 113 gtcaagctcta tctattggca accgactctt gtatgttta taagaattat ttactagata 5160  
 114 ttagccgaaa atgaattgtt aatttattct ctggtgcttg ataagacatt acaaattttt 5220  
 115 atgtgttaat caactagatt taatgttaag ttcatatgaa tattccattt gtgaaataat 5280  
 116 attgtataact caatcagttt attagatagc atatcttgcattt attagtagaa gcctgttaat 5340  
 117 cagatttttg gaatgaaattt gcaggagctt agcaccgtaa cttctatggc accagttcc 5400  
 118 agttttcccc atatccggc ttagtgcggc cctgcatac aagcaattcc ttcgattcaa 5460  
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 124 cagggatttta cttcaatggc tgggtcggtt gcaactatgg gatctgcaca aacggggacaa 5820  
 125 agccgggtc ctaataatgc cttagtgcctt caaaacaacgtt caaatgtcgc ttcaaaccctt 5880  
 126 ggtgttccac aaccatgtca agggatgaaac caaggaagtca attctggagc aatgatgcaa 5940  
 127 ggtggattt ccattgtacca aacatgtatg agtggtctt gtcaggaaa tggctcctct 6000  
 128 ggaacagggtg gaatgtatgc tactccagga gttggccac aagcgaatc aggaataacaa 6060  
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 130 gctatgcaga cttcacaatc caaatatgtt aaagtctggg aggtatgtc agtttatctt 6180  
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 133 gggcactta ctatgcactt ttcttccccctt ttttctgaat ttactggat cacatgttta 6360  
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 135 ttgtttatattt tgacaggggtt taccggatgtt cttctgcctt tgatgtttaa gtttataact 6480  
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 137 agaaatgtt gtagtgcataacttgcattt tgccttcttctt ttttgcattt ctccccagggtt 6600  
 138 tggcagccaa ctggccacca actatgcaga ttgttgcattt catatcccag gaccatatgaa 6660  
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 148 caggccat cacaacgtt ttttgcattt gatgttgcattt gatgttgcattt ttttgcattt 7260  
 149 atgttttccat caggggtaag gaagttactaa gatgttgcattt gatgttgcattt ttttgcattt 7320  
 150 cattatgttgcactt gttttgtggt ttttgcattt gatgttgcattt ttttgcattt ttttgcattt 7380

## RAW SEQUENCE LISTING

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Input Set : A:\SEQLIST532792000800.txt

Output Set: N:\CRF4\12282005\J560652.raw

151 aaattccaaa tcagcaacag cagcagcaac aacaactcca ccagcaacaa caacaacaac 7440  
 152 agcagatcca gcagcagcag caacaacaac aacacctcca acagcaacag atgccacaac 7500  
 153 tccagcaaca acaacaacaa caccagcagc aacagcaaca gcagcatcaa ttgtcacagc 7560  
 154 tccaaacatca tcagcagcaa caacaacaac agcagcaaca acagcagcag catcaattga 7620  
 155 cacagttca acaccatcat cagcagcagc agcaggcgtc gcccgtgaat cagatgcagc 7680  
 156 agcagacttc gcccgtcaat cagatgcagc aacagacttc gcctctgaat cagatgcagc 7740  
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 158 gatcacaaca aggtgggtt ggagggcagc ctaacatgcc tggagctggc ttcatggat 7860  
 159 aaataaaaat atcagcttca gtgctaatta attagattt tcataactta acatttttc 7920  
 160 tttttttttt ggtcaactcg atcgtcgcca tggttttaga ctctgttag ttgtcctt 7980  
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 172 gagttaaatg gagagaggaa ccctgtttct actgttgagc tatactgtt gatcttcaat 180  
 173 tctcatggtt catattgtgc ttgcttggta caacggagtg gctggacaag ggatgttcat 240  
 174 attttcttgc attggcttcc ttccatataaa tttggtgggt gtggtttcaa tgagggttgc 300  
 175 acagctgaag ggcttgcgcg agcattgtat atgtttctc ctcccttcagg ccaagctcaa 360  
 176 ccaagtaacg atctgaaaag acactgtatc ctaatcacag ccagaatcc tcacatattg 420  
 177 ccaacacacccg tatactgtcc acgattgcaaa aatgtggaaac ggaatgagaa tggtgatgcg 480  
 178 caagctgaga gtcgattatc agatgtcgatc acagtggctt catatttgc taagtgttct 540  
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 181 cttgtcctga tctcggagaa ttttggatgg gcatgtgtcg ccttaagtca ttctgctaca 720  
 182 aatttgcac agactcagag ccctgtgaaa gtggacaggg ccactgttgc tccatctatt 780  
 183 ccagtcaactg ggcaacctcc agctccgtg tcatcagccaa atggacctat tcagaatcgg 840  
 184 caaccaggat tcttttttttgcggacc agttccaaact gctactgtga aagttagcc tagcaccgta 900  
 185 acttctatgg caccagtcc tagtttccc catatcccggt ctgtagctcg gcctgctaca 960  
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 187 aacccggaga atgcaccaga tattaaatgg tgggtggtca gtggatgac gcccaccattg 1080  
 188 cgtactggtc ctccctgggg agccaatgtt aatctgttta ataatttttc tcaagtccga 1140  
 189 caagtcatga gctctgcagc tctggcaggt gcagcctcat cgggtgggca aagtgcgggt 1200  
 190 gcaatgcata tgcataatgatcaaca ggaatggctt catcttgc tcccttcacaa 1260  
 191 actgtgtttt caactggaca gcaggaaatc acttcaatgg ctgggtcggt tgcaactaatg 1320  
 192 ggtatctgcac aaacgggaca aagcccccgggt cctaataatg cttttagtcc tcaaacaacg 1380  
 193 tcaaatgtcg tttccaaatcttgc tgggtttca caaccaatgc aaggatgaa ccaaggaaatg 1440  
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 195 ggtcaaggaa atgtcttcc tggaaacagggt ggaatgtatc ctactccagg agttggccaa 1560  
 196 caagcgcaat caggaatataca acaacttggt ggcagtaaca gctcagctcc taatatgcag 1620  
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 201 cttgttttc gggccatgttcaacatggg ttcttaggac aacttcagga taaaagctt 1920  
 202 tggcacttca tccagttgcc atcacagacg ctctttcttct ctgtctctga caaggcttgc 1980

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Input Set : A:\SEQLIST532792000800.txt  
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203 cgcttgattt gaatgcttt cccagggat atgggttgtt ttAAaccaca aattccaaat 2040  
 204 cagcaacagc agcagcaaca acaactccac cagcaacaac aacaacaaca gcagatccag 2100  
 205 cagcagcagc aacaacaaca acacctccaa cagcaacaga tgccacaact ccagcaacaa 2160  
 206 caacaacaac accagcagca acagaacag cagcatcaat tgtcacagct ccaacatcat 2220  
 207 cagcagcaac aacaacaaca gcagcaacaa cagcagcagc atcaattgac acagcttcaa 2280  
 208 caccatcatc agcagcagca gcagcgtcg ccgctgaatc agatgcagca gcagacttcg 2340  
 209 ccgctcaatc agatgcagca acagacttcg cctctgaatc agatgcagca gcaacagcag 2400  
 210 cctcaacaga tggtaatggg tggtaagct tttgcacaag cccctggaaat atcacaacaa 2460  
 211 ggttgtggtg gagggcagcc taacatgcct ggagctggct tcatggata aataaaaata 2520  
 212 tcagcttcag tgctaattaa ttagattat cataacttaa cattcttct ttcttcttg 2580  
 213 gtcactcga tcgtcgccat ggttttagac tctgttagt tgccttttgc tttttttga 2640  
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 217 <211> LENGTH: 836  
 218 <212> TYPE: PRT  
 219 <213> ORGANISM: Arabidopsis thaliana  
 221 <400> SEQUENCE: 3  
 222 Met Ser Ser Glu Val Lys Gln Leu Ile Val Val Ala Glu Gly Thr Ala  
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 224 Ala Leu Gly Pro Tyr Trp Gln Thr Ile Val Ser Asp Tyr Leu Glu Lys  
 225 20 25 30  
 226 Ile Ile Arg Ser Phe Cys Gly Ser Glu Leu Asn Gly Glu Arg Asn Pro  
 227 35 40 45  
 228 Val Ser Thr Val Glu Leu Ser Leu Val Ile Phe Asn Ser His Gly Ser  
 229 50 55 60  
 230 Tyr Cys Ala Cys Leu Val Gln Arg Ser Gly Trp Thr Arg Asp Val Asp  
 231 65 70 75 80  
 232 Ile Phe Leu His Trp Leu Ser Ser Ile Gln Phe Gly Gly Gly Phe  
 233 85 90 95  
 234 Asn Glu Val Ala Thr Ala Glu Gly Leu Ala Glu Ala Leu Met Met Phe  
 235 100 105 110  
 236 Ser Pro Pro Ser Gly Gln Ala Gln Pro Ser Asn Asp Leu Lys Arg His  
 237 115 120 125  
 238 Cys Ile Leu Ile Thr Ala Ser Asn Pro His Ile Leu Pro Thr Pro Val  
 239 130 135 140  
 240 Tyr Arg Pro Arg Leu Gln Asn Val Glu Arg Asn Glu Asn Gly Asp Ala  
 241 145 150 155 160  
 242 Gln Ala Glu Ser Arg Leu Ser Asp Ala Glu Thr Val Ala Ser Tyr Phe  
 243 165 170 175  
 244 Ala Lys Cys Ser Val Ser Leu Ser Val Val Cys Pro Lys Gln Leu Pro  
 245 180 185 190  
 246 Thr Ile Arg Ala Leu Tyr Asn Ala Gly Lys Pro Asn Gln Gln Ser Ala  
 247 195 200 205  
 248 Asp Leu Ser Ile Asp Thr Ala Lys Asn Thr Phe Tyr Leu Val Leu Ile  
 249 210 215 220  
 250 Ser Glu Asn Phe Val Glu Ala Cys Ala Ala Leu Ser His Ser Ala Thr  
 251 225 230 235 240  
 252 Asn Leu Pro Gln Thr Gln Ser Pro Val Lys Val Asp Arg Ala Thr Val  
 253 245 250 255

**VERIFICATION SUMMARY**

**PATENT APPLICATION: US/10/560,652**

**DATE: 12/28/2005**

**TIME: 12:58:45**

**Input Set : A:\SEQLIST532792000800.txt**  
**Output Set: N:\CRF4\12282005\J560652.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application No  
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:444 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:13  
L:527 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:656  
L:636 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15  
L:659 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:176  
L:693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:448

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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; Xaa Pos. 666  
Seq#:15; Xaa Pos. 177,188,451,454,458